

Appln. No. 10/733,738
Amendment dated May 15, 2006
Reply to Office Action dated November 16, 2005

Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)
2. (Previously Presented) A turbine blade with abrasive tip coating, comprising:
an elongated turbine blade having a tip at one end, said tip having an abrasive coating including a substantially 50:50 mixture of cubic boron nitride and silicon nitride.
3. (Cancelled)
4. (Previously Presented) A turbine blade with abrasive tip coating, comprising:
an elongated turbine blade having a tip at one end, said tip having an abrasive coating including a mixture of cubic boron nitride, silicon nitride and CoNiCrAlY.
5. (Currently Amended) The turbine blade according to claim 4 wherein the abrasive coating includes [[a]] substantially equal parts of cubic boron nitride and silicon nitride.
6. (Previously Presented) The turbine blade according to claim 2 wherein the cubic boron nitride and the silicon nitride are electroplated to the blade tip.
7. (Currently Amended) A turbine blade and ring segment assembly, comprising:
a turbine ring segment having an abradable coating on an inner surface thereof;

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an elongated turbine blade having a tip at one end, said blade tip having an abrasive coating, said abrasive coating engaging and abrading said abradable coating of the turbine ring segment; wherein said abrasive coating of said blade tip includes a mixture of substantially equal parts of cubic boron nitride and silicon nitride.

8. (Cancelled)

9. (Original) The assembly according to claim 7 wherein the abrasive coating includes a super alloy of at least one of nickel and cobalt.

10. (Original) The assembly according to claim 9 wherein the super alloy is CoNiCrAlY.

11. (Cancelled)

12. (Original) The assembly according to claim 7 wherein the cubic boron nitride and the silicon nitride are electroplated to the blade tip.

13. (Original) The assembly according to claim 7 wherein the abradable material of the ring segment is a thermal barrier coating.

14. (Original) The assembly according to claim 13 wherein the thermal barrier coating is porous.

15. (Original) The assembly according to claim 14 wherein the thermal barrier coating is ceramic.

16. (Original) The assembly according to claim 15 wherein the thermal barrier coating includes yttria-stabilized zirconia (YSZ).

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17. (Original) The assembly according to claim 16 wherein the thermal barrier coating includes 8 wt. % YSZ (8YSZ).

18. (Previously Presented) The turbine blade according to claim 4 wherein the abrasive coating is electroplated to the blade tip.